

August 28, 1986

90158B-6007

PCB Test Cleanup Plan
Transwestern Pipeline Company
Compressor Station No. 5
Thoreau, New Mexico

OBJECTIVE

Analysis of soil samples from Transwestern Pipeline Company facilities in New Mexico has identified the presence of polychlorinated biphenyl (PCB) contamination at various locations. This contamination is associated with locations where contaminated pipeline condensate has been handled. It is Transwestern Pipeline Company's intent to remove PCB contaminated soil, to the degree operationally practical, to at least the level agreed on with EPA Region VI (25 mg/kg). To evaluate the actual effort and techniques required to accomplish this, it is intended to conduct a test cleanup at the Thoreau Compressor Station prior to implementing a fullscale operation. This test cleanup is hoped to demonstrate the actual distribution and extent of contamination on a typical station (existing extend estimates are based on limited sampling and may over-estimate actual volumes) and identify operational cleanup requirements, including excavation technique, rates, materials handling and use of Transwestern personnel. In addition, the test will provide additional information necessary to determine most economic disposal method for other sites having similar levels of contamination. If volumes of contaminated material can be minimized, disposal of the material by commercial landfilling may be economically advantageous. If the volumes generated prove to be large, provisions to dispose of the material at specifically designed mobile facility may be necessary.

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The following plan describes the planned test cleanup.

EXTENT OF CONTAMINATION

Areas of contamination are indicated in figures 1 and 2. Available data suggest that deep contamination is limited to the area in the immediate vicinity of the former condensate impoundment. The data also suggest that contamination in other areas is limited to very near surface and is probably associated with visually detectable staining.

APPROACH

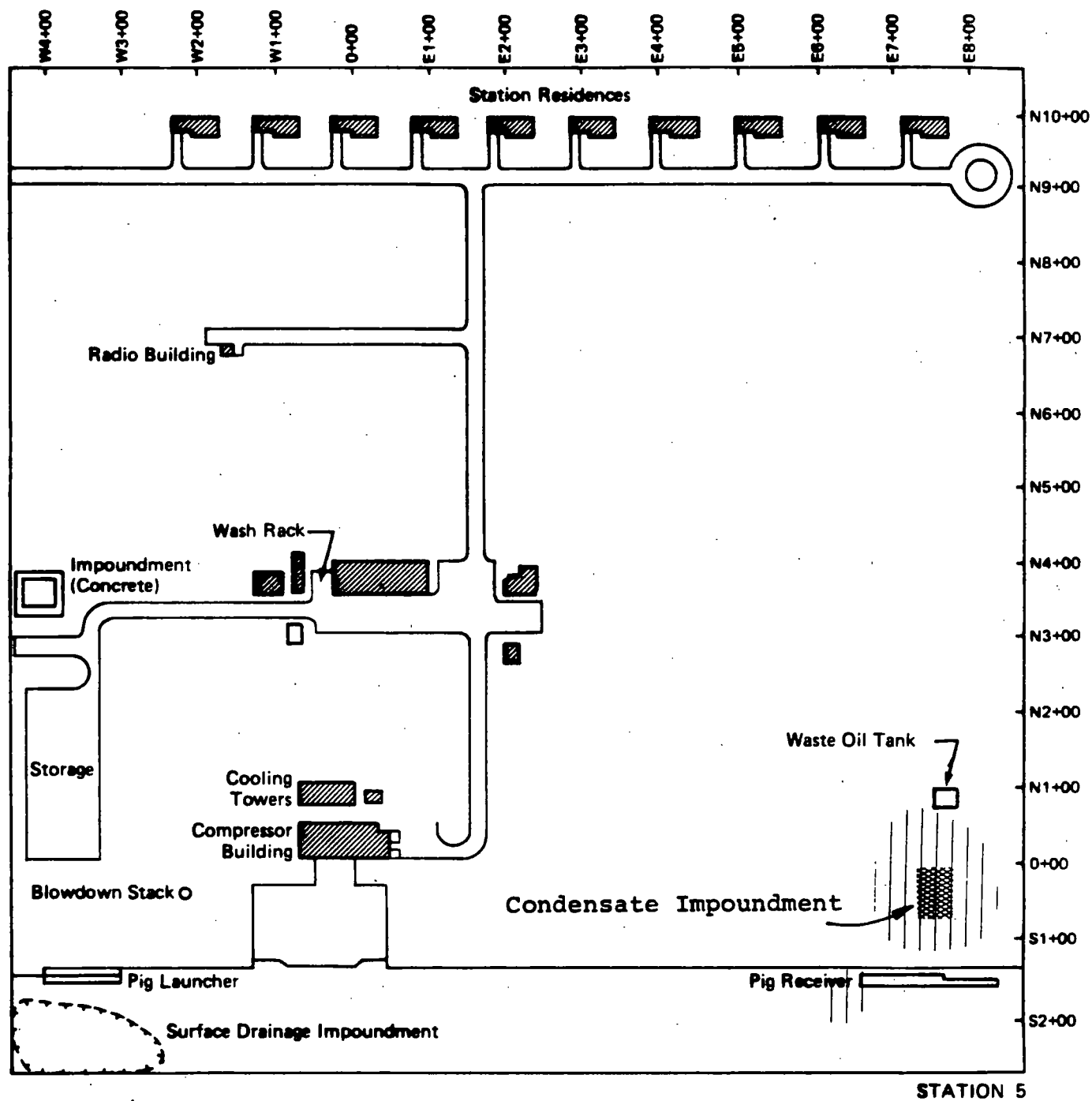
The following description addresses the approach that will be taken in the test excavation. Maximum effort will be given to evaluation of procedures resulting in the least amount of soil removal.


1.0 HEALTH AND SAFETY

All personnel involved in active cleanup activities (those activities involving direct exposure to potentially contaminated materials) will be required to participate in a health and safety program acceptable to Transwestern Pipeline and/or Woodward-Clyde Consultants. Such programs will include hazardous material handling training and medical monitoring. It is anticipated that remedial activities will require the use of respirators (during excavation) and protective clothing. Prior to the cleanup tests, the existing site safety plan will be modified to include planned activities. All operations will be monitored by an onsite Safety Officer.

2.0 CONTAMINATED AREA IDENTIFICATION/ISOLATION

Areas of contamination identified in the field sampling program will be physically located. Non-essential personnel will be restricted from entering these areas during cleanup. In addition, areas downwind of




 SCALE
 1 in = 200 ft

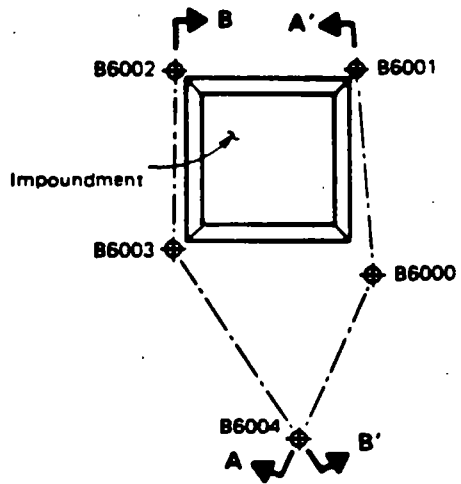


Zone of surface contamination



Zone of subsurface contamination

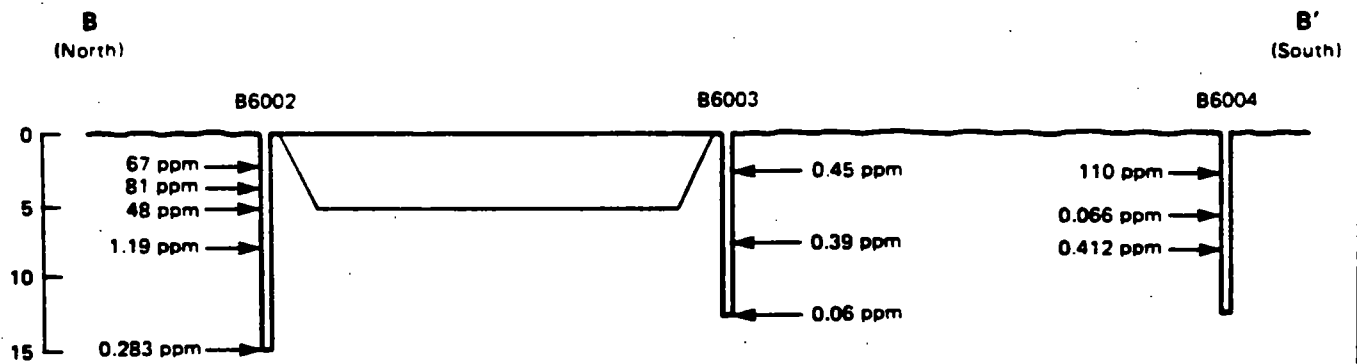
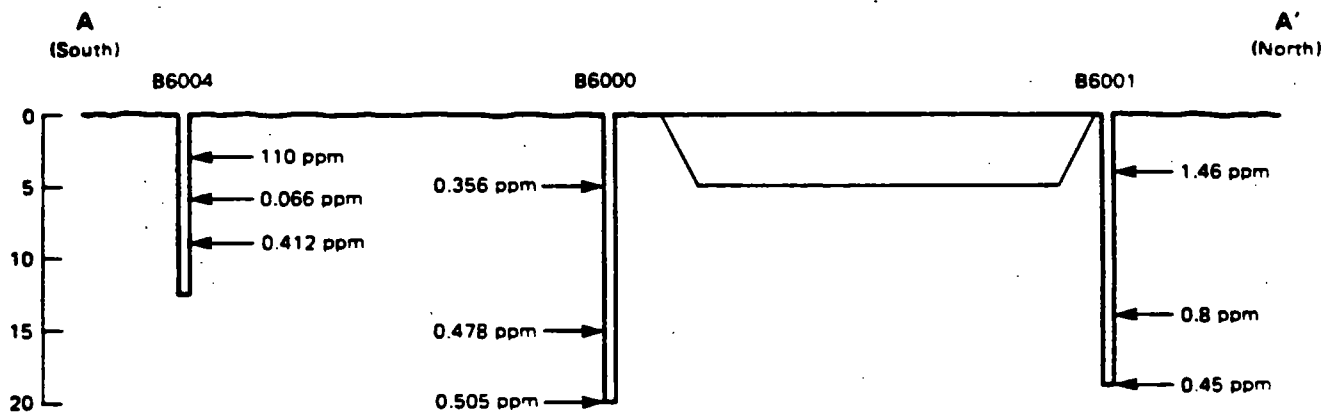
Project No.	90158B	ZONE OF PCB CONTAMINATION THOREAU COMPRESSOR STATION	FIG.1
Woodward-Clyde Consultants			



0 10 20 30 40 50 ft

LEGEND:

◆ Boring location



0 5 10 15 20 25
Horizontal Scale in Feet

Project No.
90158B

Transwestern Pipeline Company

Woodward-Clyde Consultants

CROSS SECTION OF BORINGS
WITH PCB CONCENTRATIONS
AT STATION 5 - THOREAU

FIG. 2

contaminated zones will be restricted to prevent possible human exposure to contaminant-laden dust.

3.0 SITE PREPARATION

Minor site grading may be required for improvement of access corridors and construction of berms around stockpile or loading areas. It is anticipated that such work can be accomplished using company-owned equipment. Access corridors and parking areas will be marked as necessary. The pig receiver area will be modified as necessary to act as a decontamination station for equipment. A personnel decontamination station will be set up in the vicinity of the station shower room.

4.0 FIELD ANALYSIS

A Transwestern Pipeline Company mobile gas chromatography laboratory will be set up on site to provide field analytical testing for the excavation and hazardous waste cargo manifesting. All post-cleanup verification testing will be conducted using EPA sampling procedures and an independent analytical laboratory using EPA approved analytical protocols.

5.0 ENVIRONMENTAL MONITORING

Wind speed and direction will be monitored during operations using existing station instrumentation. In addition, a HiVol or other particulate sampler will be set up at each of the following locations: downwind of the excavation area and between the excavation area and the nearest occupied structure. Samples will be collected daily starting at least 24 hours before initiation of excavation and analyzed for particulates and PCB. The intent of the monitoring is primarily to allow assessment of the need for dust control measures, although the monitoring will evaluate potential downwind contamination associated with the operation.

6.0 EXCAVATION CRITERIA

Initial excavation will be limited to the removal of visually contaminated material. If necessary to achieve the 25 mg/kg level, additional excavation will be conducted using field analytical data for guidance.

7.0 TEST EXCAVATION TECHNIQUES

Excavation of the impoundment (subsurface) area will be conducted by backhoe. Impoundment fill material will be excavated and placed in an adjacent bermed and lined pile or in lined dumpsters to await loading and transport to a disposal site. If necessary, the pile will be covered with plastic to prevent dust generation or rainfall infiltration. Composite samples of the underlying surface will be taken and analyzed by gc after the contaminated material is removed. If necessary, successive shallow excavations will be made in the underlying material until levels below 25 mg/kg are achieved. Transport will be by licensed hazardous waste hauler. Disposal will be at an EPA-approved landfill.

Surface excavation tests will evaluate the effectiveness of shallow scraping using techniques such as a backhoe bucket, drag scrapper, and/or manual labor. Initial attempts will be limited to the removal of visually identifiable stains as described above. If necessary, successive shallow cuts will be made and subsequently tested. Contaminated material generated will be handled as previously described.

8.0 DUST CONTROL

The scale and intensity of site activities is not anticipated to result in the generation of excessive dust. However, excavation activities may expose cleanup crews to contaminated dust, and wind may spread such dust.

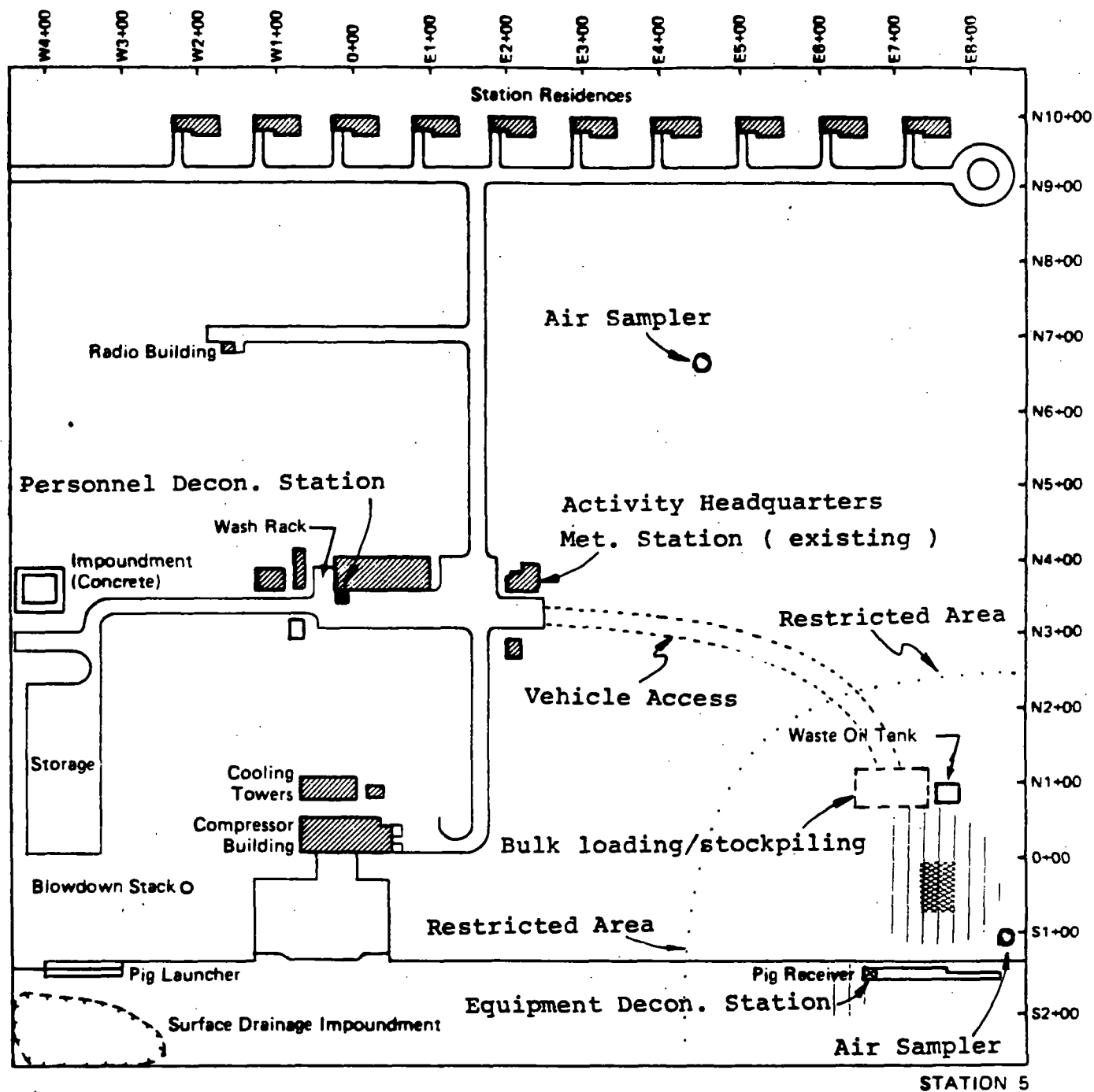
Cleanup activities will progress from upwind areas to downwind areas to the degree practical. All cleanup personnel operating equipment or in potentially dusty areas will be required to wear respiratory protection. Remedial activities will not be conducted when winds of excessive velocity are blowing toward occupied facilities. Should excessive dust become a problem, waterspray or other control measures may be tested.

9.0 MATERIAL HANDLING

Several excavated material handling areas will be designated. Such areas will be located to minimize movement requirements and will be cleaned (by shallow excavation) after their use is finished. Contaminated material will be handled and transported in bulk and in accordance with all applicable regulations. A preliminary cleanup activity layout is presented in figure 3.

The activity plan is based on the following assumptions:

- 1) Movement of contaminated material will be held to a minimum. Bulk loading will take place within each major area of operation.
- 2) Traffic patterns for excavation equipment and personnel will be restricted to specific corridors with no equipment or personnel allowed outside these areas without decontamination.
- 3) All liquids generated during decontamination will be placed in the aboveground 500 bbl tank for later disposal.
- 4) Activities will be located to minimize interference with station activities and will avoid operational areas to the degree possible.
- 5) Laden trucks will not be allowed to cross buried gas pipelines.



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 SCALE
 1 in = 200 ft



Zone of surface contamination

Zone of subsurface contamination

Project No.	90158B	CLEANUP ACTIVITY PLAN	FIG. 3
Woodward-Clyde Consultants		THOREAU COMPRESSOR STATION	

- 6) Composite samples of material in each storage pile will be collected and analyzed for PCB content using gas chromatography. Analytical data will be provided as necessary for transport manifesting and disposal.
- 7) Manifesting, Labeling and Documentation: All bulk containers will be assigned a reference code number corresponding to excavation location, date of storage, transportation date and any other relevant information. Each container will be labels according to DOT requirements. Hazardous waste manifests will be filled out prior to shipment to the disposal facility. Weight of material loaded will be monitored for inventory purposes and to prevent overload violation.

10.0 EQUIPMENT DECONTAMINATION

Personnel will decontaminated at the location established. All spent protective equipment will be drummed for disposal as hazardous waste, and additional cleanup conducted as per the site safety plan. Equipment decontamination will be conducted at the pig receiver where contaminated material can be collected and stored. All equipment will be steamed cleaned to removed soil accumulations prior to exiting the contaminated area.

11.0 CLEANUP VERIFICATION

At the completion of excavation and loading activities, surface verification sampling using EPA procedure EPA-560/5-85-026. Verification analysis will be conducted at an independent laboratory.

Two reports will be prepared, the initial report will consist of a summary of the cleanup operation and cleanup verification. It will serve as a "closure report" and will be retained in the company files.

The second report will evaluate cleanup techniques tested and develop recommendations for subsequent cleanup activities at other locations.

12.0 RESTORATION

After receipt of satisfactory verification results, site restoration will be conducted to return treated areas to near original contour and drainage. Revegetation will be conducted as appropriate.